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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,839	08/30/2001	Yoichiro Yamashita	0042-0456P	6858

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EXAMINER
WALLS, DIONNE A

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 06/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/941,839	YAMASHITA, YOICHIRO	
	Examiner	Art Unit	
	Dionne A. Walls	1731	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 3-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims 1 and 4 of U.S. Patent No. 6,571,802. Although the conflicting claims are not identical, they are not patentably distinct from each other because one having ordinary skill in the art could have selected starch phosphate or cellulose phosphate to be used as a decomposition accelerating agent (corresponding to the claimed "biodegradation promoting agent").

Regarding claim 3, it follows that if one selects either the starch phosphate or cellulose phosphate as a decomposition accelerating agent, it would also have the claimed water-solubility parameters, as this is characteristic of these substances (which is further confirmed in the instant specification on page 9).

Regarding claim 4, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the decomposition accelerating agent in the claimed amount, after routine experimentation, in order to determine the optimal amount to provide sufficient biodegradation of the cellulose acetate article.

3. Claims 2 and 7-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Patent No. 6,571,802 in view of Tsugaya et al (US. Pat. No. 5,711,322).

While claims 1 and 4 may not be drawn to a tobacco filter, the Tsugaya et al reference teaches that it is known to provide a molded cellulose acetate article, having biodegradation promoters therein, for use as a filter for tobacco smoke. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to fabricate the claimed invention of US. Pat. No. 6,571,802 in the form of a tobacco filter since, as evidenced by the Tsugaya reference, cellulose acetate structures having biodegradation promoters are known for their use as filters in the tobacco art.

Further, regarding claims 2 and 9, filters made of fibrous cellulose acetate and having the claimed DS values are known in the tobacco art, as evidenced by the Tsugaya reference (see col. 3, lines 7-14).

Regarding claims 7-8, Tsugaya teaches the value of adding a photodegradation agent, of titanium dioxide, to cellulose acetate tobacco filters. Therefore, doing so would have been an obvious step to one having ordinary skill in the art in order to promote the photodegradation of the filter.

Regarding claims 10 and 12, filters made of cellulose acetate fibers having the claimed fiber length are known in the tobacco art, as evidenced by the Tsugaya reference (see col. 3, lines 36-46).

4. Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Patent No. 6,571,802 in view of Barkowsky et al (US. Pat. No. 5,744,523).

The decomposition accelerating agents of starch phosphate or cellulose phosphate of US. Pat. No. 6,571,802 are inherently in the form of fine particles. While US. Pat. No. 6,571,802 may not teach of a dispersant for dispersing the fine particles in the cellulose acetate composition, Barkowsky et al teaches dispersing finely divided solids, including pigments, in organic media in the presence of a dispersing agent (see col. 1, lines 9-18). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a dispersing agent to disperse the fine particles of cellulose phosphate or starch phosphate (which is coupled with the titanium dioxide pigment) in order to ensure a stable/effective dispersion of material in the organic media, which is known from the disclosure of Barkowsky et al.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5, 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsugaya et al (US. Pat. No. 5,711,322).

Tsugaya et al discloses cellulose acetate fibers, having the claimed fiber length, which are useful as filter material for tobacco products, said filter materials may comprise a photodegradation promoter, comprising titanium dioxide, and finely divided inorganic substances (which would inherently serve as a "biodegradation promoting agent") (see entire reference).

Regarding claim 2, the cellulose acetate may have DS values from 1 – 3 (corresponding to the "DS value…between 2.0 – 2.6").

Regarding claim 3, calcium carbonate (corresponding to the "salt of carbonic acid") would inherently meet the limitations of claim 3.

Regarding claim 5, Tsugaya et al that the solid additives may be provided in concentration of from .005 - .5 % weight percent based on the weight of the fiber (corresponding to the claimed ".01 – 10% by weight based on said cellulose acetate") .

Regarding claims 7 and 8, Tsugaya et al discloses that the photodegradation promoter can comprise titanium dioxide (corresponding to the claimed "titanium oxide").

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsugaya et al (US. Pat. No. 5,711,322) in view of Barkowsky et al (US. Pat. No. 5,744,523).

Tsugaya et al discloses that the calcium carbonate is "finely divided" – which suggests that it is in the form of fine particles. While Tsugaya et al may not teach of a dispersant for dispersing the fine particles in the cellulose acetate composition, Barkowsky et al teaches dispersing finely divided solids, including pigments, in organic

media in the presence of a dispersing agent (see col. 1, lines 9-18). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a dispersing agent to disperse the fine particles of calcium carbonate (which is coupled with the titanium dioxide pigment) in order to ensure a stable/effective dispersion of material in the organic media, which is known from the disclosure of Barkowsky et al.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Dionne A. Walls
June 11, 2003